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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,580	05/11/2005	Ryousuke Kaneshige	1155-0283PUS1	4471

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BIRCH STEWART KOLASCH & BIRCH  
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FALLS CHURCH, VA 22040-0747

EXAMINER
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OLADAPO, TAIWO

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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04/04/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,580	<b>Applicant(s)</b> KANESHIGE ET AL.	
	<b>Examiner</b> TAIWO OLADAPO	<b>Art Unit</b> 4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/11/2005;08/10/2005;11/15/2005;08/25/2006.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (US 2002/0035044)

3. In regards to claim 1, Okada teaches a lubricating oil composition comprising 89% by weight of base oil (page 13, Table 3) and 1 to 20 % by weight of ethylene-propylene copolymer having 40 – 77% ethylene content, Mw/Mn is 2.4 or less, and a melting point of 60°C or less (abstract) which encompasses the claimed range of 30°C or less. Okada teaches the copolymer with ethylene is a C<sub>3</sub> to C<sub>20</sub> alpha olefin. Propylene is a C<sub>3</sub> alpha olefin. Regarding kinematic and intrinsic viscosities, it is noted that “Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). In this case, Okada teaches an identical lubricating oil composition comprising base oil, ethylene-propylene copolymer, having Mw/Mn value and weight percentage in the specified range, thus inherently having intrinsic and kinematic viscosities identical to those instantly claimed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 62002/0035044) in view of Cody et al. (US 6,322,692)

8. In regards to claim 2, Okada teaches a lubricating oil composition with a lubricating oil base such as mineral oil or poly- $\alpha$ -olefin [0190]. Okada does not specifically recite the viscosity

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index, saturated hydrocarbon content or sulfur content of the lubricating oil composition. Cody teaches a lubricating oil base consisting of Group II basestocks having saturates content of 90 wt.% or greater, a sulfur content of not more than 0.03 wt. % and a viscosity index (VI) greater than 80 (column 3 lines 44 – 46). Basestocks used in lubricating oils are divided into five groups, Groups I - V and are well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the lubricating oil base of Cody with that of Okada in order to produce a lubricating oil composition having high viscosity index and low sulfur content. The motivation to combine them stems from the premise that lubricants with high viscosity index generally reduces friction and wear on surfaces, and low sulfur contents in lubricants reduce environmental contaminants from internal combustion engine emissions.

9. In regards to claim 3, Okada and Cody combined teach a lubricating oil composition comprising a viscosity index of not less than 80 (Cody, column 3 line 46), 0.1 to 5% by weight of ethylene-propylene copolymer [Okada, 0213], ethylene content from 40 – 77 % by weight (Okada, abstract), Mw/Mn of not more than 2.4 (Okada, abstract), melting point of 60°C or less, which encompasses the claimed range of 30°C or less, and 0.05 to 5% by weight of pour point depressant [Okada, 0213]. Okada and Cody combined do not teach the kinematic viscosity at 100°C or the intrinsic viscosity of the lubricating oil composition. As stated in §3 above, these properties are intrinsic properties that are inherently present in the lubricating oil composition having identical chemical substances. Okada and Cody combined teach 89% lubricating oil base (Okada, page 13 Table 3) but not 92 to 99.85 %. The amount of lubricating oil base present in a lubricating oil composition is a results effective parameter. Generally, differences in

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concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. There is no evidence of criticality in the specification of the current invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use 89% or up to 99% by weight of lubricating oil base or as necessary to provide the desired properties in the lubricant.

10. In regards to claim 4, Okada and Cody combined inherently teaches a lubricating oil composition having melting point value for the pour point depressant since the overall melting point of 30°C of the lubricating oil is met.

11. In regards to claim 5, Okada and Cody combined teach that the lubricating oil comprising an ethylene/a-olefin copolymer is used in automobiles which is an internal combustion engine [Okada, 0002].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAIWO OLADAPO whose telephone number is (571)270-3723. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov can be reached on (571)272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TO  
/Michael Kornakov/  
Supervisory Patent Examiner, Art Unit 4151